

WHAT IS CLAIMED IS:

1. A conveyance apparatus using movable bodies, each movable body being able to move along a fixed path by being supported and guided on a main rail by means of a plurality of guided devices, each movable body having a main body formed by a plurality of frame members connected in a relatively rotatable fashion in a traverse direction with respect to a longitudinal direction via connecting devices, at least one of the frame members being provided with a supporting section for conveyed items, each of said guided devices being coupled in a relatively rotatable fashion to the movable body by means of vertical axles, wherein

a plurality of lateral travel rail members are provided on a lateral side of a prescribed region of the fixed path for supporting and guiding the guided devices in such a manner that the frame member provided with the supporting section assumes an orthogonal position with respect to a direction of travel, whilst the other frame members become aligned with the direction of travel, and branching means is provided in the prescribed region for causing the guided devices on the main rail to branch off onto the plurality of lateral travel rail members.

2. The conveyance apparatus using movable bodies according to claim 1, wherein the main body of the movable body is formed by three frame members and the supporting section is provided on the middle frame member, and the lateral travel rail members are formed in a pair and the movable body is conveyed in such a manner that a front frame member thereof is aligned with one of the lateral travel rail members, and a rear frame member thereof is bent so as to be aligned with the other lateral travel rail member.

3. The conveyance apparatus using movable bodies according to claim 1, wherein when a plurality of movable bodies are supported and guided on the lateral travel rail members, guided devices of preceding and following movable bodies which are adjacently positioned in the direction of travel can be coupled together.

4. The conveyance apparatus using movable bodies according to claim 1, wherein motional force applying means are provided for applying motional force to a movable body supported on the plurality of lateral travel rail members.

5. The conveyance apparatus using movable bodies according to claim 1, wherein the region where the lateral travel rail members are provided is formed into a working path section for conveyed items.

6. The conveyance apparatus using movable bodies according to claim 1, wherein the movable body is formed with passive surfaces on side faces of the respective frame members thereof, and feeding means having feed rollers capable of abutting on these passive surfaces is provided in the fixed path.

7. The conveyance apparatus using movable bodies according to claim 1, wherein said branching means comprises a plurality of divided rail members, formed by dividing the main rail in the prescribed region and capable of supporting the guided devices, and rotating devices for causing these divided rail members to rotate about vertical axes.

8. The conveyance apparatus using movable bodies according to claim 1, wherein said branching means is constructed so as to branch off all of the movable bodies arriving at the prescribed region in the fixed path onto the plurality of lateral travel rail members.

9. The conveyance apparatus using movable bodies according to claim 1, wherein said branching means is constructed in such a manner that the frame members other than the frame member provided with the supporting section assume an orthogonal attitude in a same direction, with respect to the frame member provided with the supporting section.

10. The conveyance apparatus using movable bodies according to claim 1, wherein the movable body is provided with a supporting section for conveyed items in a lower portion of at least one of the frame members.